

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A process of manufacturing membrane-electrode assemblies, said process comprising

forming an electrolyte membrane by a film casting method in which a solution of a proton conductive polymer in a first organic solvent is flow cast on a film-casting substrate to form a wet film, and the electrolyte membrane is obtained by reducing an amount of residual solvent in the wet film, wherein the electrolyte membrane contains residual solvent in an amount of 5 parts by weight or less based on 100 parts by weight of the proton conductive polymer;

pressure bonding an said electrolyte membrane with electrode substrates to form a membrane-electrode assembly,

wherein a ~~good~~ second solvent ~~for the electrolyte membrane~~ is applied to at least one of facing surfaces of the opposed electrode substrate and the electrolyte membrane prior to the pressure bonding;

wherein the ~~good~~ second solvent is applied in an amount of from 0.001 mg/cm² to 10 mg/cm².

2. (Currently Amended) The process as claimed in claim 1, wherein a ~~good~~ the second solvent for the electrolyte membrane is applied to both of the facing surfaces of the opposed electrolyte membrane and the electrode substrate.

3. (Cancelled)

4. (Previously Presented) The process as claimed in claim 1, wherein the electrolyte membrane comprises a sulfonated aromatic polymer.

5. (Currently Amended) The process as claimed in claim 4, wherein the good second solvent for the electrolyte membrane is an aprotic dipolar solvent.

6. (Original) The process as claimed in claim 4, wherein the sulfonated aromatic polymer is a sulfonated polyarylene.

7. (Cancelled)

8. (Currently Amended) The process as claimed in ~~claim 7~~ claim 1, wherein the amount of residual solvent in the wet film is reduced by soaking the wet film in water.

9. (Currently Amended) The process as claimed in claim 1, wherein the good second solvent for the electrolyte membrane is applied to at least the facing surface of the electrode substrate.

10. (Previously Presented) The process as claimed in claim 1, wherein a pressure in the pressure bonding is in the range of 0.5 to 20 MPa.

11. (Currently Amended) The process as claimed in claim 1, wherein the good second solvent is applied in an amount of from 0.01 mg/cm² to 1 mg/cm².

12. (New) A process of manufacturing membrane-electrode assemblies, said process comprising

forming an electrolyte membrane by (a) producing a wet electrolyte membrane film by a film casting method in which a solution of a proton conductive polymer in a first organic solvent is flow cast on a film-casting substrate, and (b) reducing an amount of residual solvent in the wet electrolyte membrane film to form the electrolyte membrane;

then pressure bonding said electrolyte membrane with electrode substrates to form a membrane-electrode assembly,

wherein a second solvent is applied to at least one of facing surfaces of the opposed electrode substrate and the electrolyte membrane prior to the pressure bonding.

13. (New) A process of manufacturing membrane-electrode assemblies, said process comprising

forming an electrolyte membrane by (a) producing a wet electrolyte membrane film by a film casting method in which a solution of a proton conductive polymer in a first organic solvent is flow cast on a film-casting substrate, (b) reducing an amount of residual solvent in the wet electrolyte membrane film by soaking in water, and (c) drying the soaked, wet electrolyte membrane film to form the electrolyte membrane;

then pressure bonding said electrolyte membrane with electrode substrates to form a membrane-electrode assembly,

wherein a second solvent is applied to at least one of facing surfaces of the opposed electrode substrate and the electrolyte membrane prior to the pressure bonding.

14. (New) The process as claimed in claim 1, wherein the second solvent has a dielectric constant of 20 or more.

15. (New) The process as claimed in claim 1, wherein the second solvent is at least one selected from the group consisting of N,N-dimethylacetamide, N-methyl-2-pyrrolidone, γ -butyrolactone, tetramethylurea, dimethylsulfoxide, hexamethylphosphoric triamide and sulfolane.